

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Jiri Zemlicka et al.

Serial No.: Not Yet Assigned

Filed: Herewith

For: 2-HYDROXYMETHYLCYCLOPROPYLI-
DENEMETHYLPURINES AND -PYRIMIDINES
AS ANTIVIRAL AGENTS

Attorney Docket No.: WSV-374CPCN

Group Art Unit:

Examiner:

Commissioner for Patents
Washington, D.C. 20231

CERTIFICATION UNDER 37 CFR 1.10

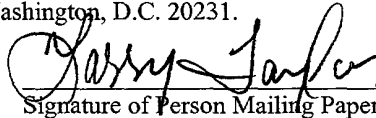
Date of Deposit: January 14, 2002

Mailing Label Number: EL 931674948 US

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date indicated above in an envelope as "Express Mail Post Office to Addressee" service under 37 CFR 1.10 and addressed to Commissioner for Patents, Washington, D.C. 20231.

Larry Taylor

Name of Person Mailing Paper



Signature of Person Mailing Paper

PRELIMINARY AMENDMENT

Dear Sir:

Preliminary to examination of the above-referenced patent application, please amend the above-titled application as follows.

In the Specification

On page 1, lines 4-8, please replace the paragraph with the following paragraph:

The present invention is a continuation of U.S. Serial No, 09/267,839, filed March 12, 1999, which is a continuation-in-part of PCT International Application No. PCT/US98/00440, filed January 7, 1998, designating the United States, which claims

priority from U.S. Serial No. 60/035,826, filed January 8, 1997 and U.S. Serial No. 60/045,676, filed May 6, 1997, all of which are hereby expressly incorporated by reference.

In the claims:

Please cancel without prejudice claims 2-28, amend claim 1 and add new claims 29-41 as follows:

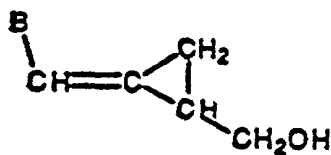
Please amend claim 1 as follows:

1. (Amended) A compound having the formula:

wherein B is a heterocyclic ring derived from a purine or pyrimidine moiety, and pharmaceutically acceptable salts, and prodrugs, thereof.

Please add the following new claims:

29. (New) A compound having the formula:



wherein B is a heterocyclic ring derived from a purine or pyrimidine moiety, and pharmaceutically acceptable salts, and prodrugs, thereof.

30. (New) The compound of Claims 1 or 29, wherein B is selected from the group consisting of 6-aminopurine, 2,6-diaminopurine, 2-amino-6-cyclopropylaminopurine, 6-hydroxypurine, 2-amino-6-halo substituted purine, 2-amino-6-alkoxy substituted purine, 2-amino-6-hydroxypurine, 3-deazapurine, 7-deazapurine, 8-azapurine, cytosine, 5-halo

substituted cytosine, 5-halo substituted cytosine, 5-alkyl substituted cytosine, thymine, uracil and 6-azapyrimidine.

31. (New) The compound of Claims 1 or 29, wherein B is selected from the group consisting of adenin-N⁹-yl, guanin-N⁹-yl, cytosin-N¹-yl, 2,6-diaminopurine, 2-amino-6-cyclopropylaminopurin-N⁹-yl and 2-amino-6-chloropurin-N⁹-yl.
32. (New) An antiviral compound selected from the group consisting of syn-N⁹-(2-hydroxymethylcyclopropylidenemethyl) adenine, syn-N⁹ - (2 - hydromethylcyclopropylidenemethyl) guanine, syn-N¹-(2-hydroxymethylcyclopropylidenemethyl) cytosine, syn-2,6-diamino-N⁹-(2-hydroxymethylcyclopropylidenemethyl) purine, syn-2-amino-6-cyclopropylamino-N⁹-(2-hydroxymethylcyclopropylidenemethyl) purine and pharmaceutically acceptable salts, and prodrugs, thereof.
33. (New) An antiviral compound selected from the group consisting of methyl phenyl-phosphoro-L-alaninate of syn - N⁹ - (2 - hydroxymethylcyclopropylidenemethyl) adenine, methyl phenyl-phosphoro-L-alaninate of anti-N²-(2-hydroxymethylcyclopropylidenemethyl) and pharmaceutically acceptable salts, and prodrugs, thereof.
34. (New) A composition comprising a compound of Claims 1 and 29-33 and a pharmaceutically acceptable carrier.
35. (New) A method of treating mammals infected with a virus comprising the step of administering to the mammal an antiviral compound selected from the group consisting of the compounds of Claims 1 and 29-34.
36. (New) The method of Claim 35, wherein said mammal is a human.
37. (New) The method of Claim 35, wherein said virus is a human herpes virus.
38. (New) The method of Claim 35, wherein said virus is a human immunodeficiency virus.
39. (New) The method of Claim 35, wherein said virus is hepatitis B virus.

40. (New) The method of Claim 35, further comprising the step of administering an additional antiviral compound.

41. (New) The method of Claim 40, wherein the additional antiviral compound is selected from the group consisting of acyclovir, ganciclovir, zidovudine, AZT, ddI, ddC, d4T, and combinations thereof.


REMARKS

Preliminary to examination of this application, please amend claim 1, cancel claims 2-28 and add new claims 29-41. By the present amendment, claim 1, 29-41 are pending in the application. Support for the foregoing new claims can be found throughout the specification and drawings, and in the claims as originally filed. The above amendments introduce no new subject matter.

If there are any questions regarding the proposed amendments to the application, we invite the Examiner to call Applicants' representative at the telephone number below.

Respectfully submitted,

LAHIVE & COCKFIELD, LLP



DeAnn F. Smith, Esq.

Reg. No. 36,683

Attorney for Applicants

28 State Street
Boston, MA 02109
Tel. (617) 227-7400
Fax (617) 742-4214

Date: January 14, 2002

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

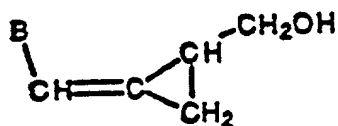
On page 1, lines 4-8, please modify the paragraph as shown:

The present invention is a continuation of U.S. Serial No, 09/267,839, filed March 12, 1999, which is a continuation-in-part of PCT International Application No. PCT/US98/00440, filed January 7, 1998, designating the United States, which claims priority from U.S. Serial No. 60/035,826, filed January 8, 1997 and U.S. Serial No. 60/045,676, filed May 6, 1997, all of which are hereby expressly incorporated by reference.

IN THE CLAIMS:

Please amend claim 1 as follows:

1. (Amended) A compound having the formula:



wherein B [is selected from the group consisting of 2-amino-6-azidopurine, 2-amino-6-methoxypurine] is a heterocyclic ring derived from a purine or pyrimidine moiety, and pharmaceutically acceptable salts, and prodrugs, thereof.